

## ABSTRACT

A low cost signature test for RF and analog circuits. A model is provided to predict one or more performance parameters characterizing a first electronic circuit produced by a manufacturing process subject to process variation from the output of  
5 one or more second electronic circuits produced by the same process in response to a selected test stimulus, and iteratively varying the test stimulus to minimize the error between the predicted performance parameters and corresponding measured values for the performance parameters, for determining an optimized test stimulus. A non-linear model is preferably constructed for relating signature test results employing the  
10 optimized test stimulus in manufacturing testing to circuit performance parameters.